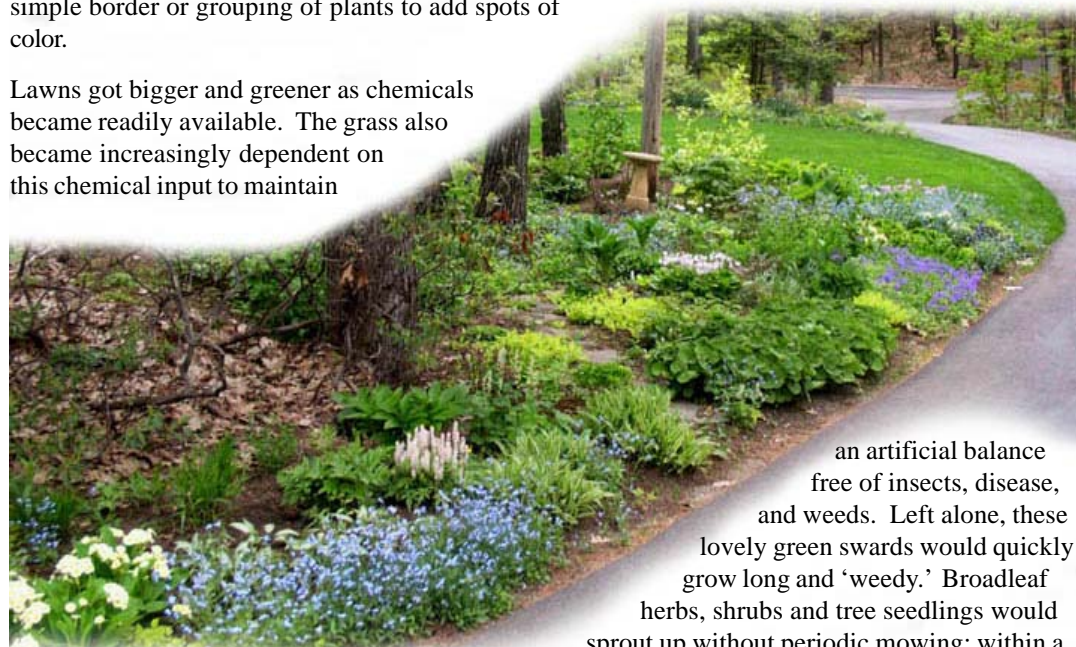


Let The Flowers Grow

For A More Natural Residential Landscape

There's nothing natural about the great American lawn – it's not naturally occurring, especially here in New England, nor is it self-sustaining. The tradition of lawns in this country began long after the first settlers carved farms out of the woodlands. It was not until people were well established in the mid 1800s that they began to find the leisure time and discretionary income to ornament their strictly utilitarian surroundings – both indoors and out. Eventually lawns, once a symbol of wealth and elegance, became more commonplace. Vegetable gardens, drying yards, and herb patches were moved out of view to the rear of the house. They were replaced by manicured tracts of grass, soon followed by hedges, topiary, and foundation plantings. Formal gardens graced with statuary were the aspirations for the fortunate, while many installed a simple border or grouping of plants to add spots of color.

Lawns got bigger and greener as chemicals became readily available. The grass also became increasingly dependent on this chemical input to maintain



an artificial balance free of insects, disease, and weeds. Left alone, these lovely green swards would quickly grow long and 'weedy.' Broadleaf herbs, shrubs and tree seedlings would sprout up without periodic mowing; within a few years, the lawn would succumb to field, then field to thicket, and within decades the thicket would become forest. Indeed, without frequent intervention, the great American lawn would go the way of the dinosaur.

Some people claim that lawns should disappear, as they can be chemically dependent, water intensive, and cause pollution from excessive nutrients leaching into streams and ponds. Others see the right to maintain a lawn with whatever potions available on the market as integral to the pursuit of liberty and happiness. Yet another viewpoint recognizes the functional and aesthetic value of a modest bit of green velvet upon which to rest

NATURAL LANDSCAPE - SEE PAGE 4

In This Issue:

Spring has sprung, and the grass is...out of style. In these times of "greening up" we are learning that the traditional lawn is not the norm in the environment. Nature has been sending us the message through our lawn maintenance efforts (and bills); if lawns wanted to grow there in the first place they wouldn't be such a chore to maintain. Read on for the latest thoughts on improving environmental quality right in your own back yard.

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dcr
Massachusetts



Massachusetts Department of
Conservation and Recreation
Division of Water Supply Protection
www.mass.gov/dcr/waterSupply.htm



NUMBER 19
Spring 2008

Please Pick Up After Your Pup

Now that spring is back, dogs are going to be looking to their owners to go on longer walks and spend more time outdoors. What do you do when you take your dog for a walk? Do you leave the pet waste on the sidewalk, along the edge of the street or a stream, or dispose of it directly into a storm drain? If you leave your pet's waste on the ground, you may be surprised to learn that these everyday walks, which are a normal part of caring for a pet, can be a source of water pollution.

Pet waste left in our yards and communities can have many adverse effects on the environment, as it is full of harmful bacteria and excess nutrients. Besides the fact that pet waste is a neighborhood nuisance, it can make people sick, especially children who are more likely to come into contact with it while playing. When pet waste is washed into lakes or streams, the waste decays, using up oxygen and sometimes releasing ammonia, which can kill fish. Pet waste also contains nutrients that encourage weed and algae growth. Overly fertile water becomes cloudy and green – imagine this in your local pond or stream!

Rainfall and snowmelt in the Wachusett Reservoir watershed flows directly into our streams, rivers, lakes and reservoirs, picking up contaminants along the way. That's why it is so important to ensure that pollutants such as pet waste do not end up in storm drains.



While it may not seem like a big deal if one more cat or dog contributes some waste to the neighborhood environment, think of how many pets are in your community. Animal waste may not be the biggest or most toxic pollutant going into our waters, but it is one of those little problems that can lead to serious environmental and health problems. Managing pet waste properly is something that everyone can easily do to make a positive difference in the quality of our surface waters. Individual actions can result in significant water quality improvements when carried out by a majority of people. Unlike some forms of stormwater pollutants, pet waste can be easily and economically managed by individuals in our watershed, helping keep water resources, as well as landscapes, safe and aesthetically pleasing. 💧

Kelley Freda -DCR Environmental Analyst

Pet Waste Facts

- Four out of every 10 U.S. households have a dog.
- Each dog produces between one third and three quarters of a pound of waste per day.
- A new national survey says that 40 percent of dog owners don't clean up after their pets.
- One gram of dog waste contains about 23 million fecal coliform bacteria.
- Research shows that up to 95% of fecal coliform bacteria found in stormwater comes from animals.
- Scientists from the U.S. Geological Survey estimate that pet waste contributes between 20 to 30 percent of the water pollution in America.

Local Facts

- There are over 5,500 licensed dogs within the Wachusett Reservoir watershed.
- It is estimated that about 2,750 pounds of dog waste and 5.2 billion fecal coliform bacteria are produced EVERY DAY in the Wachusett Reservoir watershed.
- Improperly disposed cat waste and used kitty litter can also cause water quality problems.

Ways You Can Help

- Pick up after your pet! Properly dispose of fecal matter by placing it in a trash can or flushing it unbagged down the toilet.
- **Never put pet waste directly into a storm drain.**
- Encourage others to pick up too.

Fishing Season Opens At The Quabbin Reservoir

Anglers from seasons past display their catch on the shores of the Quabbin Reservoir.



Beginning in mid-April, anglers flock to Quabbin Reservoir to try their luck at landing the big one. The six month season provides access to perhaps the best cold water fishery in the state, with a number of state records pulled from Quabbin waters over the years.

The origins of the Quabbin Fishing Program date back to 1946 when shore fishing was first permitted at the reservoir. Quabbin Reservoir and its immediate

FISHING SEASON - SEE PAGE 6

FOR DETAILED FISHING INFORMATION...

Quabbin Reservoir: www.mass.gov/dcr/waterSupply/watershed/quabfish.htm or call the Visitor Center at (413) 323-7221.

Wachusett or Sudbury Reservoir: www.mass.gov/dcr/waterSupply/watershed/wachfish.htm or call the Wachusett Ranger Office at (978) 365-3800.

Trustees Of The Watershed



Water Supply Protection Trust members at the Quabbin Reservoir (L to R) Fred Laskey, Katherine Haynes-Dunphy, Ian Bowles, Judith Eiseman, Jonathan Yeo (Director, DCR/DWSP) and William Meehan (inset).

Photo: DCR/DWSP

DCR's Division of Water Supply Protection (DWSP) is mandated by Chapter 92A½ of the Massachusetts General Laws to "construct, maintain and operate a system of watersheds, reservoirs, water rights and rights in sources of water supply and shall supply thereby a sufficient supply of pure water to the Massachusetts Water Resources Authority, and shall utilize and conserve said water and other natural resources in

order to protect, preserve and enhance the environment of the commonwealth and to assure the availability of pure water for future generations." The Massachusetts Water Resources Authority (MWRA) is responsible for the treatment and distribution to over 2 million people of the source water protected by DCR. The MWRA is also responsible for funding DWSP's operating budget, land

acquisition costs, and Payment in Lieu of Taxes obligations.

The creation of DCR in 2004 provided the opportunity to create a new mechanism for financing DWSP. The Water Supply Protection Trust, created by Chapter 149 of the Acts of 2004, s. 27, and written into the general laws at MGL c. 10, § 73, establishes a budgetary process where MWRA funds go directly to Watershed Management programs, bypassing all legislative appropriations. The Trust has allowed DCR to quickly fill a range of positions, as well as make needed capital expenditures and improvements, that were previously frozen by state budget constraints.

The Water Supply Protection Trust has a five-person board of trustees responsible for approving DWSP's annual work plan and budget each spring for the following fiscal year beginning in July.

[THE WATERSHED TRUST - SEE PAGE 6](#)

Reservoir Watch - What's Happening on the Water

February 2008 was a particularly wet month at the Quabbin and Wachusett Reservoirs with 10.1" and 9.6" of respective precipitation. This is over twice the February average of 4.0" tracked over the past 24 years.



DCR/DWSP Quabbin Visitors Center

Prior to February, precipitation had been at or below average. September 2007 was a particularly dry month, with only 1.4" of precipitation, or less than one-third of the expected rainfall. October and December 2007 (2.2" each month) and January 2008 (2.1") had two-thirds the 24-year average precipitation, while December 2007 (3.5") was right on target.

Winter snow pack in the watersheds, combined with the significant precipitation in February, caused the Quabbin to reach capacity this spring, sending excess water over the spillway in March.

Work continues on the crest gate project at the Wachusett Dam. This \$5.5 million investment is converting the 19th century hand inserted stop logs that help control the reservoir's water levels into 21st century automated stainless steel gates. The project also includes berm and spillway rehabilitation. The next scheduled milestone to reach with reservoir elevation below 390' is the Crest Gate dry test. Once accomplished, the reservoir elevation will be increased to 392' for the wet test necessary for the project's final acceptance.

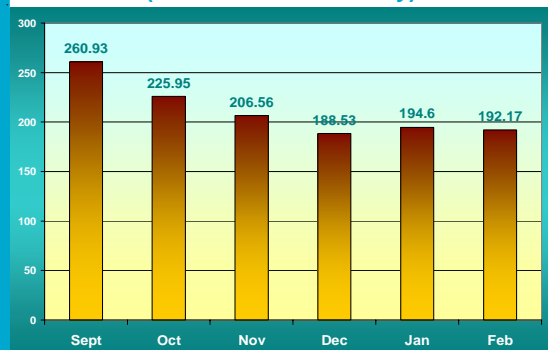
Reservoir Levels and 6-month Precipitation

(September 2007 to February 2008)

Reservoir	Quabbin	Wachusett
Minimum*	523.15'	387.71'
Percent Full	87.4%	85.3%
Date	12/23-26/07	9/4/07
Maximum*	523.55'	392.80'
Percent Full	93.8%	95.5%
Date	2/1/08	2/23/08
Precipitation	23.32"	19.40"
Seasonal Avg.	23.06"	22.37"

*Reservoir Depth in Feet Above Mean Sea Level

2007 System-wide 6-Month Water Usage (Million Gallons Per Day)



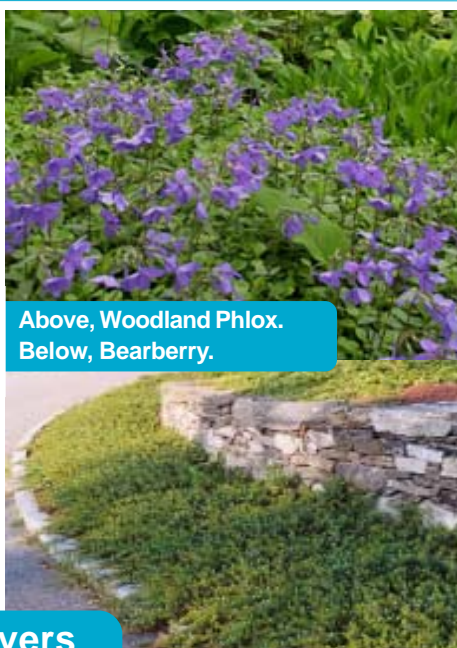
Data and text provided by MWRA

NATURAL LANDSCAPE - FROM PAGE 1

our eyes and bodies. This middle ground is firmly routed in the conclusion that lawns should be maintained in a least-toxic, low-input manner. The principles for this perspective include: mow high, drop clippings, fertilize sparingly, use no herbicides or pesticides, and reduce the lawn (and mowing) a little bit more every year by adding borders of ornamental native plants that provide shelter, color, texture, and structure, as well as food for birds and other wildlife.

Converting Lawn to Native Landscape

A sensible, as well as beautiful, alternative to grass can be achieved using selections of native plants that are generally well adapted to the climate and soils. There



Above, Woodland Phlox.
Below, Bearberry.

leave it covered for the season while the grass underneath dies and begins to break down. Till or turn over in the fall or following spring and voilá - the soil is ready for planting. Perennials, trees, and shrubs require a deeper soil than lawn grasses, so incorporate organic matter to a depth of 12"-16". Add plenty of compost or well-rotted manure when converting lawn to border, incorporating it thoroughly into the soil. Mulch (manures, compost or shredded leaves) replenished each year not only cuts down on weeding and watering but also adds vital organic material back to the soil, reducing the need for fertilizers. Once the soil is prepared, you're ready to plant.

Shady spots are a logical place to start when converting lawn to border, since

Five Fabulous Groundcovers

PLANT NAME (* denotes native to MA)	FLOWERING SEASON	FLOWER COLOR	HEIGHT	ASPECT
Woodland Phlox (<i>P. divaricata</i> , <i>P. stolonifera</i>)	May	blue, lavender, pink, or white	8-12"	shade
Moss Phlox (<i>P. subulata</i>)	May	pink, white, lavender	4"	sun
Camby Paxistima (<i>Paxistima canbyi</i>)	spring	inconspicuous	6-8"	sun
Bearberry* (<i>Arctostaphylos uva-ursi</i>)	spring	white/pink	4-6"	sun
Barren Strawberry (<i>Waldsteinia ternata</i>)	spring	yellow	4-6"	sun/pt shade

most lawn grasses prefer sunny sites and lawns are often weaker in shady spots. There are numerous plants suited to shady conditions. Herbaceous

are many choices of trees, shrubs, and herbaceous perennials that are easy to care for, durable, and require little maintenance. These additions will increase not only the beauty, but also the vitality of the home landscape.

A first step is to expand existing borders or start new ones along lawn edges. Remove the existing lawn by stripping the sod off and adding it to a compost heap (provided it has not been treated with herbicides). If converting large expanses of lawn, and stripping the sod off by hand is not practical, then simply cover the grass with several sheets of newspaper, mulch over it with an organic mulch (shredded leaves, lawn clippings, compost, composted manures, etc.) and



Above, Winterberry.
Right, Mountail Laurel.
Below, Mountain Andromeda.



perennials, plants that lack woody stems and return from the crown year after year, come in a variety of shapes, sizes, and color. Many selections of native plants are widely available in nurseries and garden centers. Among the finest North American native perennials for garden use are woodland phlox (*Phlox stolonifera* and *P. subulata*), Allegheny spurge (*Pachysandra procumbens*), native ginger (*Asarum canadense*), ferns (*Dryopteris marginalis*, *Polystichum acrostichoides*),

**Six Stunning Shrubs**

PLANT NAME (* denotes native to MA)	FLOWERING SEASON	FLOWER COLOR	HEIGHT	ASPECT
Winterberry* (<i>Ilex verticillata</i>)	May	white, inconspicuous	6-8'	sun/part shade
Dwarf Fothergilla (<i>Fothergilla gardenii</i>)	May	white	3-4'	sun
Mountain Laurel* (<i>Kalmia latifolia</i>)	late May-June	white, pink	5-8'	sun/part shade
Blueberry* (<i>Vaccinium corymbosum</i>)	late May	white	6-10'	sun
Summer Sweet* (<i>Clethra alnifolia</i>)	summer	white, pink	6-8'	sun
Mountain Andromeda (<i>Pieiris floribunda</i>)	mid-April	white	2-6'	sun/part shade

trilliums (*Trillium luteum*, *T. grandiflorum*, *T. erectum*), jack-in-the-pulpit (*Arisaema tricolor*), bugbane (*Actaea racemosa*), doll's eyes (*Actaea pachypoda*, *A. rubra*), Dwarf Crested Iris (*Iris cristata*), and Virginia Bluebells (*Mertensia virginica*).

Joe Pye-weed (*Eupatorium maculatum* 'Gateway') is an excellent choice to try for sunny situations. 'Gateway' is an especially fine cultivar that bears old-rose colored flowers in enormous clusters on 6' stems. Though Joe Pye-weed naturally occurs in moist soils it is quite tolerant of more moderate sites – plant it in good garden soil in full sun for best performance. Coneflowers (*Echinacea purpurea*), Bluestar (*Amsonia tabernaemontana*), Summer Phlox (*Phlox paniculata*), Helen's flower (*Helenium autumnale*), Goldenrods (*Solidago*), Bee Balm (*Monarda fistulosa*), and Compass Plant (*Silphium perfoliatum*) all perform

beautifully in full sun and have numerous selections (cultivars) with a variety of desirable attributes.

When planting shrubs, it's hard to beat blueberries (*Vaccinium corymbosum*) for year round interest. Early lightly fragrant flowers attract bumble bees who ensure pollination and (if the bird don't beat you) ample fruit to snack on. In autumn, the radiant red fall color is more brilliant than the overused and problematic burning bush (*Euonymus elatus*) and the gnarled old stems, topped by red or green new twigs, provide beauty all winter.

Winterberry (*Ilex verticillata*) is another outstanding shrub; this native shrub, adapted to a variety of soils, comes into its own in August and September when the brilliant red berries ripen. The berries of most cultivars ('Winter Red,' Sprite, Sparkleberry, Afterglow) hold well into the winter and provide food for birds when all else is scarce. The berries are so

NATURAL LANDSCAPE - SEE PAGE 6

About Tower Hill Botanic Garden...



The Worcester County Horticultural Society, founded in 1842, is dedicated to "advancing the science and encouraging and improving the practice of horticulture." The Society has operated Tower Hill Botanic Garden since 1986, a living museum of plants and a 132-acre garden paradise.

A panoramic view of Mount Wachusett and the Wachusett Reservoir provide an idyllic setting for the Garden, which is the most comprehensive public garden in New England. Current Garden features include:

- A Lawn Garden with thousands of perennials and 350 varieties of trees and shrubs.
- A highly ornate Systematic Garden that displays 26 plant families arranged by evolutionary sequence.
- A Secret Garden that showcases plants noted for their texture and fragrance, while more naturalistic woodland trails meander through the property.

A Cottage Garden adjacent to a 1740 Farmhouse creates an intimate setting for many unusual perennials, annuals, and vegetables. In winter, a 4,000 square-foot Orangerie [greenhouse] is filled to capacity with flowering subtropical plants, citrus and palm trees, forced bulbs, and seasonal displays.

Amenities include a gift shop, library, and Twigs Café. The Garden hosts many special events and educational programs throughout the year.

For More Information:
Tower Hill Botanic Garden
11 French Drive, PO Box 598
Boylston, Massachusetts 01505-0598
508-869-6111
www.towerhillbg.org

Left, Fringetree flowers close up.
Center, Redbud tree.
Right, Sourwood flower detail.



Eight Elegant Trees

PLANT NAME	FLOWERING SEASON	FLOWER COLOR	HEIGHT	ASPECT
Redbud (<i>Cercis canadensis</i>)	May	pink	20-30'	sun/part shade
Mountain Silverbell (<i>Halesia monticola</i>)	May	white	60'	sun/part shade
American Snowbell (<i>Styrax americanus</i>)	June-July	white	8-10'	sun/part shade
River Birch* (<i>Betula nigra</i> [Heritage] aka 'Cully')	early spring	catkins	40'+	sun/part shade
Shadbush* (<i>Amelanchier canadensis</i> , <i>A. arborea</i>)	spring	white	15-20'	sun/part shade
Striped Maple* (<i>Acer pennsylvanicum</i>)	spring	green	15-20'	shade
Sourwood (<i>Oxydendrum arboreum</i>)	summer	white	25-30'	sun
Fringetree (<i>Chionanthus virginicus</i>)	late May-June	white	25-30	sun/part shade

(* denotes native to MA)

FISHING SEASON - FROM PAGE 2

watershed lands had been closed to all public access during the years the reservoir was filling (1939-46), but after it reached capacity, access restrictions were relaxed and shore fishing was permitted under Chapter 421 of the Acts of 1946, which was amended by Chapter 300 of the Acts of 1947. In 1951, regulations were promulgated authorizing boat access for fishing purposes on the reservoir.

The laws allowing boats on Quabbin Reservoir were made over the objections of the Metropolitan District Commission's Water Division (DCR's and MWRA's predecessor), which was concerned with potential impacts on drinking water quality. Over the years, the responsible managing agencies have successfully minimized the impact of boating on the reservoir by implementing public access policies to control these activities and closely monitoring water quality. This vigilance has successfully mitigated the introduction of boats on the reservoir, as there have been no significant damages to this drinking water supply.

Governor Paul Dever noted when signing the legislation that, by opening the Quabbin Reservoir to fishing, the state was more than doubling the surface water acreage open to public fishing in Massachusetts. Fishing license sales in Massachusetts had doubled in the post-war years, and anglers were anxious to have boat access to previously restricted water bodies.

Rules and Regulations were promulgated the following year, including restrictions on the size of motors (maximum of 7 ½ horsepower), establishing a six-month season and limiting boats to 60% of the reservoir surface. On May 27, 1952, Quabbin Reservoir was opened to boat fishing for the first time. Approximately 100 cars lined up at the three boat launch area gates (8, 31, and 43) awaiting access to this new water body. A total of 275 anglers in 140 boats participated that first day, catching a total of 350 fish.

Quabbin Reservoir saw a steady rise in fishing activity until 1978, when there were over 68,000 visitors at the three boat launch areas. The greatest number of shore fishers was recorded in 1966 (13,162), while 1979 saw the greatest

number of people renting boats (26,660) and launching private boats (32,979).

Quabbin Reservoir is characterized as an oligotrophic water body with a relatively low nutrient load. It is incapable of being a highly productive fishery. The qualities that make the reservoir's water ideal for drinking water also limit its ability to produce and sustain greater fish populations. Quabbin, nonetheless, produces some impressive fish and continues to be a popular destination for anglers.

The three Quabbin boat launch areas are open seven days a week for the season, which runs this year from April 19th through October 18th. Daily operation begins at 6 AM. The boats off-the-water time and the launch area closing time are seasonally adjusted, ranging between 5 – 7 PM and 6:30 – 8:30 PM respectively. Boat rentals are available on a first-come, first-serve basis, and private boat launching is available for boats that meet the DCR regulations, including maximum horse-power ratings of 20 hp for two-stroke engines and 25 hp for four-stroke engines. 💧

- Clif Read - DCR Quabbin Visitors Center



WATERSHED TRUST - FROM PAGE 3

The members of the board of trustees are:

- **Fred Laskey (chairman)**, Executive Director of the MWRA.
- **Ian Bowles**, Secretary of the Executive Office of Energy and Environmental Affairs.
- **Judith Eiseman**, representative from the Swift River Valley Historical Society.
- **Katherine Haynes Dunphy**, Chairwoman of the MWRA Advisory Board.
- **William Meehan**, representative jointly selected by the North Worcester County Quabbin Anglers Association, Inc. and the Quabbin Fishermen's Association, Inc. 💧

- Joel Zimmerman - DCR/DWSP Planner

NATURAL LANDSCAPE - FROM PAGE 5

abundant on some of these cultivars that they positively glow. For an unusual twist, try the orange (Winter Gold) or yellow (*Xanthocarpa*) cultivars. For summer fragrance, try Sweet Pepperbush (*Clethra alnifolia*) and its cultivars (Ruby Spice, Anne Bidwell, Rosea, Paniculata, Creel's Calico), Fothergilla gardenia and F. major, Fringetree (*Chionanthus virginicus*), Bottle-brush Buck-eye (*Aesculus parviflora*), Mountain Laurel (*Kalmia latifolia*), and Fetterbush (*Pieris floribunda*). To complete your natural landscape theme, among the loveliest of woodland trees are Mountain Silver Bell (*Halesia monticola*), Redbud (*Cercis canadensis*), and birches (*Betula papyrifera*, *B. nigra*).

If flowing, flowering borders seem too time consuming, consider replacing lawn with ground covers. Barren Strawberry (*Waldsteinia ternata*) forms a lovely low mat in full sun or partial shade. Yellow, strawberry-like flowers adorn the plants in spring, after which it provides a simple, restive green carpet (no mowing required). Trifoliate (*Sibbaldiopsis tridentata*) bears glossy green leaves on 4-6" stems. Typically seen reeping over lichen encrusted boulders on Mount Wachusett, trifoliate is not expected in a garden, but in full sun or partial shade, given well drained soil, it performs admirably, covering itself with delicate white flower on wiry stems in spring. In fall, the glossy leaves turn vibrant shades of red holding these tones well into winter. Woodland phlox (*P. divaricata* and *P. stolonifera*) also make a lovely green groundcover. In May, these forest denizens are covered in fragrant flowers in shades of blue, purple, pink, or white, depending on the cultivar you choose. They provide a simple and easy-care green mat for the remainder of the season.

There are endless possibilities for plants that will enliven your yard, produce lasting, year-round beauty, and help reduce your lawn. Adding native plants to your home landscape will save you time and money – less mowing and watering – and support the environment as well. Visit your local nursery or botanic garden for inspiration and plants. 💧

- Joann Vieira - Tower Hill Botanic Garden
Director of Horticulture

For More Information About Green Landscapes...

Check out these books:

Native Trees, Shrubs & Vines by William Cullina (Houghton Mifflin, 2002).

Growing and Propagating Wildflowers of the United States and Canada, William Cullina (Houghton Mifflin, 2000).

The Organic Lawn Care Manual, Paul Tukey (Storey Books, 2007).

Or these websites:

Ecological Landscape Assoc.
www.ecolandscaping.org

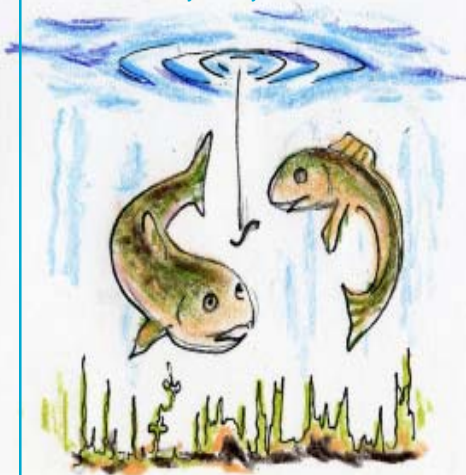
New England Wildflower Society
www.newfs.org

The Plant Database at the
University Of Connecticut
www.hort.uconn.edu/PlantsTower

Tower Hill Botanic Garden
www.towerhillbg.org

And Another Thing...

by J. Taylor



"I dunno, looks fishy to me"

Kids Corner



Growing A Garden, Growing A Family, Growing Environmental Awareness...

Using a portion of your yard for a garden has many benefits, including a learning space for your children. Children who garden become more aware of the environment as well as the source of some of the foods they eat, while also developing a sense of responsibility. When children are involved in preparing and eating food they have grown their sense of accomplishment grows, too.

A garden adds diversity to the look of a yard, creating a more engaging landscape. Many children might prefer to work in their own garden, with its variety of tasks, rather than mow the lawn or rake leaves.

Plan ahead. The whole household should be involved in the garden planning process. Plans can be made at an initial meeting and a sample layout of the garden can be drawn based on everybody's input. Make sure to include a regular watering, fertilizing and weeding schedule as part of the planning process.

Choose a section of the yard with plenty of sunlight. Even a small garden plot of 10' x 10' is enough for a vegetable garden with a good assortment of plants. Selecting some of your children's favorite vegetables will increase their interest and connection to the project. Start appropriate seeds indoors; hardier ones can be planted directly in the garden. Nurseries also offer starter plants that can often be more successful for beginners. Finally, be sure to have basic gardening tools, some of them specifically sized for your children, and a hose or other watering method.

Get started. Different plants have different needs. A little research at the library or on the Internet will reveal the most successful plants for your area. Start small until the sustained interest of your household can be determined. It's better to have a small, productive garden rather than a large plot that requires a lot of work and may end up neglected.

One activity is to measure the plants' growth on a regular basis – every 3 days or once a week on Saturday morning – using a ruler or yard stick. Comparing the growth rates of the different plants will make it easier to maintain excitement in the early stages of the garden before anything is edible. You can also take pictures of the plants while their growth is being measured. A succession of photographs will show dramatic changes in the garden over time. Those 1" sunflower seedlings should grow taller than the children by the end of the summer!

Harvest time. In the late summer and fall, making a soup with vegetables from the garden is always a rewarding activity. Reading some popular books on soups can add to the enjoyment. Stone Soup by Marcia Brown, Mouse Soup by Arnold Lobel, and Chicken Soup with Rice by Maurice Sendak are all excellent selections.

- Jim Lafley - DCR/DWSP Wachusett Education Coordinator

Fishing On Air - April 1958

When Boston's Channel 5, then WHDH-TV, came into existence in the 1950s, *Dateline Boston* was one of the first TV shows aired as a half-hour news chronicle. The live show, hosted by Jim Britt, was broadcast on weekday evenings and ran continuously for 13 years. Individual shows were given over to regularly featured co-hosts and their specialties.

Ralph "Jack" Woolner was a regular co-host who presented a show highlighting Massachusetts natural areas, nature study, and family outdoor activities. Jack did this work as a wildlife photographer and Supervisor of Audiovisual Aids with the Massachusetts Division of Fisheries and Game within the Department of Natural Resources (now part of the Department of Fish and Game). His weekly *Dateline Boston* show was the recipient of many honors, most notably the National Award for Outstanding Television from the American Association for Conservation Information in 1961, 1963, and 1964.



These photographs were taken in WHDH TV5 studios to highlight fishing at the Quabbin Reservoir.

Left, Rand Smith, of Mass. Fish and Game, shows a map of the Quabbin Reservoir.

Below, Bill Tompkins, of WHDH, and Jack Woolner, of Mass. Fish and Game, examine a prize Quabbin catch.

Photos DCR archives.

Quabbin Reservoir was a recurring topic on this early TV show. Staff from the MDC and DNR frequently assisted in highlighting their facilities and local tourism. State foresters, wildlife biologists and other professionals appeared as guests and within film sequences on natural resource conservation, which often involved the Quabbin Reservoir. 💧

- Compiled by Caroline Williams
(Jack Woolner's daughter)



DOWNSTREAM

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Downstream is produced twice a year by the Massachusetts Department of Conservation and Recreation, Division of Water Supply Protection. It includes articles of interest to residents of the watershed system communities. Our goal is to inform the public about watershed protection issues and activities, provide a conduit for public input, and promote environmentally responsible land management practices.

Governor:	Deval L. Patrick
Lt. Governor:	Timothy P. Murray
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DCR Commissioner:	Richard K. Sullivan Jr.
DWSP Director:	Jonathan L. Yeo
<i>Downstream</i> Editor:	James E. Taylor

